REMARKS

Claims 1 and 4-24 remain pending in the present application. Claim 2 is canceled as being essentially redundant with claim 1, and the dependencies of the remaining claims are modified to reflect cancellation of claim 2. Further, claims 1, 4 and 14 are amended to specify that it is the average fiber diameter of the barrier web which must be below 1 micrometer. Support is found at page 20, lines 25-28. No new matter is added.

Applicant respectfully requests entry of the proposed amendment in order to simplify prosecution and hopefully to advance prosecution, and to more particularly clarify the nature of the invention. Applicant submits that the proposed amendment raises no new issues which would require further search or consideration by the Examiner. Alternatively, Applicant requests entry in order to place the claims into better condition for consideration on appeal.

Rejection under 35 U.S.C. §102(e)/103(a) over Zucker

Claims 1, 2, 4, 7-9, 13, 14, and 16 stand rejected under 35 U.S.C. §102(e)/103(a) as anticipated by or obvious over Zucker (U.S. Published Application No. 2003/0129909). Applicant traverses this basis for rejection and respectfully requests reconsideration and withdrawal thereof.

Zucker is insufficient to anticipate or make obvious the present claims, since (1) it fails to provide an enabling disclosure as how to make a fibrous barrier web consisting of continuous fibers having average diameters of less than one micrometer; and (2) it fails to disclose fabrics having improvements in both hydrostatic head and Frazier air permeability.

(1) Zucker fails to provide an enabling disclosure of sub-micron fiber formation

Initially, Applicant directs the Examiner's attention to MPEP 716.07, entitled "Inoperability of References". That section of the MPEP indicates that "every patent is presumed valid...and...that presumption includes the presumption of operability...". The Examiner's attention is directed to the fact that Zucker is not a patent, but is instead merely a published patent application, which as of the date of this writing, is under final rejection. As such, it is questionable whether the

presumption of validity and operability afforded issued patents under 35 U.S.C. §282 should be afforded the pending Zucker application.

The test for an enabling anticipation is set forth in MPEP 2121.01.

> The disclosure in an assertedly anticipating reference must provide an enabling disclosure of the desired subject matter; mere naming or description of the subject matter is insufficient, if it cannot be produced without undue experimentation. Elan Pharm., Inc. v. Mayo Found. For Med. Educ. & Research, 346 F.3d 1051, 1054, 68 USPQ2d 1373, 1376 (Fed. Cir. 2003). MPEP 2121.01; emphasis added.

Likewise, the test for obviousness includes enablement by the prior art:

> In order to render a claimed apparatus or method obvious, the prior art must enable one skilled in the art to make and use the apparatus or method. Beckman Instruments, Inc. v. LKB Produkter AB, 892 F.2d 1547, 1551, 13 U.S.P.Q.2D 1301, 1304 (Fed. Cir. 1989); emphasis added. *Accord*, Amgen Inc. v. Hoechst Marion Roussel, Inc., 457 F.3d 1293, 1308, 79 USPQ 2d 1705 (Fed. Cir. 2006).

Applicant reiterates his comments in traverse of the rejection over Zucker, as presented in his responses of 25 July 2005 and 2 June 2006. In short, Zucker suggests the manufacture of nano-denier continuous filaments, without providing an enabling disclosure as how to do so. Zucker "describes" his desired subject matter, but fails to provide a disclosure as to how to make nano-denier fiber webs within the scope of the present claims, absent undue experimentation, contrary to Elan Pharm., *Id.*

Zucker fails to disclose any particular method for making "nano-denier" continuous filaments. Instead, Zucker cites Fabbricante et al. (U.S. Patent Nos. 5,679,379 and 6,114,017), Zeldin et al. (U.S. Patent No. 5,225,018) and Gillespie et al. (U.S. Patent No. 5,783,503), as disclosing methods for making nano-denier filaments.

> Suitable nano-denier continuous filament barrier layers can be formed by either direct spinning of nano-denier filaments or by formation of a multi-component filament that is divided into nano-denier filaments prior to deposition on a substrate layer. U.S. Pat. Nos. 5,678,379 and Bi, 6,114,017, both incorporated herein by reference, exemplify direct spinning processes practicable in support of the present invention.

> Multi-component filament spinning with integrated division into nano-denier filaments can be practiced in accordance with the teachings of U.S. Pat. Nos. 5,225,018 and No. 5,783,503, both incorporated herein by reference. (Zucker, paragraph 0018).

Fabbricante et al.

Applicant reiterates his comments in distinction over Fabbricante et al., as previously submitted; i.e. neither Fabbricante et al. reference discloses a method of making barrier webs consisting of continuous fibers having average diameters less than one micrometer. As the Examiner points out, Fabbricante et al. disclose an example comprising a mixture of continuous and discontinuous fibers having diameters of 0.5 microns. The language of Fabbricante et al. is quite clear:

> The results show that the method of the invention produced a novel web with surprisingly small diameter fibers, adequate strength in the unbonded state and a mix of continuous and discontinuous fibers. (Column 9, Table 4, lines 36-46; emphasis added).

> In contrast, claim 1 of the present application is directed to

> A nonwoven fabric comprising a support web and a fibrous barrier web consisting of continuous fibers having average diameters of less than 1.0 micrometer...(emphasis added).

Thus, the barrier web of the presently claimed invention contains only continuous fibers having average diameters of less than 1.0 micrometer, not mixtures of continuous and discontinuous sub-micron fibers, as disclosed by Fabbricante et al. Zucker provides no suggestion of modifying Fabbricante et al. in a manner to cause formation of only continuous sub-micron fibers, and as such, cannot be said to enable the skilled artisan to do so, without undue experimentation. MPEP 2121.01, citing Elan Pharm., *Id.*

The Guckert Declaration

Further as to Fabbricante et al., Applicant submits herewith the Declaration under 37 CFR 1.132 of Dr. Joseph Guckert (the "Guckert Declaration"), in which Dr. Guckert declares that he has had the opportunity to evaluate meltblown webs made by the Fabbricante et al. process and apparatus, and finds that those webs do not

consist of fibers having average diameters of less than 1.0 micrometer, as required by claim 1 of the present application. Instead, Dr. Guckert indicates that webs provided by Mr. Fabbricante had many fibers which exceeded 1.0 micrometer in diameter (claim 1) and few, if any, which were less than 0.5 micrometer in diameter (claim 4), as evidenced by the photomicrographs provided by Mr. Fabbricante himself (Guckert Declaration, Exhibits A and B). The Examiner is requested to thoroughly consider the Guckert Declaration and its Exhibits, as it is directed to precisely the same issue which has been argued throughout prosecution, i.e. the enablement of Zucker based upon its reference to the Fabbricante et al. patents.

Applicant submits that the Guckert Declaration rebuts any presumption of operability afforded the pending Zucker application, based upon the Fabbricante et al. disclosures, by a preponderance of the evidence. MPEP 716.07.

Zeldin et al. and Gillespie et al.

At page 7 of the outstanding Office Action, the Examiner argues that the direct spinning technique of Fabbricante et al. is not the sole source of enablement in Zucker as to making nano-denier continuous filaments, noting that Zucker also suggests splitting multi-component fibers. In this regard, Zucker further cites Zeldin et al. and Gillespie et al. as enablement for making nano-denier filaments (paragraph 0018).

Zeldin et al.

Zeldin et al. discloses a method and apparatus for providing uniformly distributed filaments from a spun filament bundle and spunbonded fabrics obtained therefrom (col. 1, lines 9-15). The actual spinning apparatus utilized in Zeldin et al. is not even described, within the requirements of 35 U.S.C. §112.

> Spun filament bundles freshly produced from extrusion devices (not shown) are provided to a fiber transfer tube entrance 14 and are transported by a high velocity stream of air through fiber transfer tube 12 to fiber transfer tube exit 16. (Col. 4, lines 31-35; emphasis added).

Notably, even Gillespie only refers to Zeldin et al. as disclosing "a method and apparatus for electrostatic treatment by corona discharge" (col. 9, lines 60-61), but

never for a spinning method, *per se*. Zeldin et al. is limited to post-processing of already-spun filaments. Clearly, nothing within the Zeldin et al. disclosure would enable the skilled artisan to spin continuous, sub-micron filaments, as Zeldin et al. fails to even provide an enabling disclosure of a particular spinning technique.

Zeldin et al. is entirely silent as to fiber diameters obtainable from their process (but spunbonded fibers are well-known in the art to exceed 10 micrometers in diameter; see Gillespie et al., Fig. 15). Silence cannot constitute enablement. As such, Zeldin et al. cannot enable those skilled in the art to make nano-denier fibers, in spite of Zucker's citation of Zeldin et al.

Further, Zucker provides no hint of modifications to Zeldin et al. to enable the skilled artisan to make nano-denier fibers or filaments without undue experimentation. MPEP 2121.01, *Id.*

Gillespie et al.

Gillespie et al. disclose meltspun multiple component thermoplastic continuous filaments and products made therefrom, and methods therefore (Title). Gillespie et al. disclose that multicomponent thermoplastic continuous filaments can be split into sub-denier and micro-denier filaments of low orientation (Abstract). Gillespie et al. equate "micro-denier" filaments with those produced by melt blowing (col. 2, lines 30-36), well-known in the art to range in diameter from about 2-10 micrometers (see Fabbricante et al. '017, col. 1, lines 59-62). Gillespie et al. suggest the ability to form microfilaments having deniers in the range of from about 0.1 to 0.3 denier per filament (col. 6, lines 25-30), but exemplify only fibers having deniers above 0.40 (Table 1, col. 10). A one denier filament has a diameter of about 19 micrometers (see U.S. Patent No. 5,885,909, col. 6, lines 48-52), so a 0.4 denier filament would have a diameter of about 7.5 micrometers, and a 0.1 denier filament would have a diameter of about 1.9 micrometers. Thus, it is clear that Gillespie et al. fail to disclose any method of making sub-micron diameter filaments, contrary to the suggestion of Zucker.

Further, Zucker provides no hint of modifications to Gillespie et al. to enable the skilled artisan to make nano-denier fibers or filaments without undue experimentation. MPEP 2121.01, *Id.*

Examiner's argument as to Zucker's enabling disclosure

Still, the Examiner maintains that Zucker is adequately enabled for making "nano-denier" filaments.

> Fabbricante provides a specific example comprising a mixture of continuous and discontinuous fibers having a diameter of 0.5 microns (column 9, lines 22-49). The Applicant asserts that this is not relevant because the amended claims recite the barrier webs consist only of continuous fibers. The examiner respectfully disagrees. It is clear that Zucker teaches making continuous filaments within Applicant's claimed range and Fabbricante provides an enabling disclosure as to the making of nanodenier continuous fibers so a person of ordinary skill in the art could practice the invention of Zucker. (Office Action of 16 August 2006, page 7).

Applicant simply asks "how"? Nowhere does Zucker (or Fabbricante) disclose or even suggest how to obtain a barrier layer which has only continuous sub-micron fibers. Zucker may desire and "describe" a web of continuous submicron fibers, but fails to describe how to actually make one as required by 35 U.S.C. §112 (and Elan Pharma., *Id.*), and as discussed above, Fabbricante provides no guidance as to how to avoid making mixtures of continuous and discontinuous fibers; in fact, it has been demonstrated by the Guckert Declaration that Fabbricante even fails to make webs which consist of fibers having average diameters of less than one micron. Fabbricante cannot be said to enable Zucker's desires without undue experimentation. MPEP 2121.01, *Id.*

The Examiner supplements his arguments as to Zucker's enablement by further discussing Zeldin et al. and Gillespie et al.

> Zucker teaches the nano-denier continuous filaments may be made [by] splitting multi-component fibers rather than direct spinning (paragraph 18). Zucker specifically mentions the teachings of USPN 5,225,018 to Zeldin and USPN 5,783,503 to Gillespie. Fabbricante is not the sole source of enablement. In response, the applicant asserts that Zeldin is silent regarding fiber diameters and therefore Zeldin cannot enable the claimed nano-denier fibers. The examiner respectfully disagrees. The applicant has failed to show, or attempt to show, that the method of Zeldin cannot enable one skilled in the art to make the claimed nano-denier filaments. (Office Action of 16 August 2006, page 7).

Once again, Applicant submits that Zeldin et al. is silent about fiber size and that silence cannot constitute enablement, and Zeldin et al. fail to even disclose a particular spinning technique, save their reference to spunbonding, which those skilled in the art know will not ordinarily produce even sub-denier fibers, let alone sub-micron fibers. The best efforts of Applicant's assignee in reducing spunbond fiber diameters are disclosed in U.S. Patent No. 6,548,431 (the '431 Patent), which describes a high speed spunbond spinning process, utilizing a novel high speed draw jet (Fig. 1, #164; col. 13, lines 29-43) to post-process the filaments exiting the spinneret. The smallest diameter filaments disclosed were 7.5 micrometers in diameter (Example 5, Table 1, col. 17).

Applicant submits herewith the Declaration under 37 CFR 1.132 of Mr. Michael Davis (the Davis Declaration) to this effect. (The Davis Declaration consists of six (6) paragraphs, the last of which is incorrectly identified as paragraph "11". Applicant will submit a correction upon the Examiner's request.) In paragraph 4 of the Davis Declaration, Mr. Davis indicates that the smallest filaments which were obtained during the experimentation directed toward the '431 Patent, were about 6 microns in diameter. In paragraph 5, Mr. Davis expresses his expert opinion as to the Examiner's assertion that sub-micron fibers could be spun according to the Zeldin et al. reference, and explains the technical limitations of the spunbonding method which prevent spinning of sub-micron fibers. Consideration of the Davis Declaration is respectfully requested, as it raises no new issues and merely supports Applicant's arguments as to Zeldin et al., set forth in his prior response of June 2, 2006.

Finally, Applicant reiterates his arguments in reference to Gillespie et al., set forth above. While Gillespie et al. disclose making sub-denier (or "micro-denier") filaments, Gillespie et al. do not disclose making sub-micron or "nano-denier" filaments, as suggested by Zucker. Just because Zucker asserts that nano-denier filaments could be made according to Gillespie, does not make it so. Zucker must provide some disclosure as to how to modify the teachings of Gillespie et al. or Zeldin et al. to achieve his goal. Once again,

> The disclosure in an assertedly anticipating reference must provide an enabling disclosure of the desired subject matter; mere naming or description of the subject matter is insufficient, if it cannot be produced without undue experimentation. *Elan Pharm., Inc. v. Mayo Found. For*

> *Med. Educ. & Research*, 346 F.3d 1051, 1054, 68 USPQ2d 1373, 1376 (Fed. Cir. 2003). **MPEP 2121.01**; emphasis added.

The skilled artisan, reading Zucker and referring to any or all of Fabbricante et al., Zeldin et al. or Gillespie et al., would have no clear guidance as to how to spin or otherwise produce a barrier web consisting of fibers having average diameters of less than one micron, without undue experimentation.

Since Zucker fails to disclose an effective way of making his "nano-denier" continuous filaments, either directly or by incorporation by reference, Applicant respectfully submits that Zucker is non-enabling for the purposes of the rejection, and therefore ineffective as prior art.

Withdrawal of the rejection is requested on this basis.

(2) Zucker fails to disclose each and every limitation of the present claims

Each independent claim of the present application (claims 1 and 14) requires the nonwoven fabric to have a novel combination of liquid barrier (hydrostatic head) and air permeability (Frazier permeability) properties; i.e. hydroheads between about 145 cm and about 400 cm, and Frazier permeabilities between about 0.3 m^3/m^2-min and about 11.2 m^3/m^2-min. This combination of improved properties is particularly important and advantageous for garments to be worn for long terms by workers involved in environmental cleanup, operating rooms and the like.

However, as disclosed in the present specification, prior art garments having the highest liquid barrier properties had the lowest air flow permeabilities, and vice versa (page 3, lines 1-6; page 6, lines 11-19 and Fig. 1). Microporous films which have both high liquid barrier and some air flow are known in the prior art, but are also known to provide insufficient air permeability for long term comfort in a garment (page 7, lines 20-26).

Notably, Zucker is directed to improvements only in barrier-to-basis weight ratio (paragraphs 0001 and 0017), but is silent as to air permeability. Zucker suggests combinations of nano-denier fabrics with "breathable" barrier films (microporous films) (paragraph 0028), which are discussed in the present specification as being too restrictive to air flow for long term wearer comfort. But Zucker never comments on the results of his proposed combination, i.e. what would

be the result of adding a nanodenier fibrous layer to a breathable barrier film? The skilled artisan is left to guess.

Even in the absence of a clear disclosure regarding air permeability by Zucker, the Examiner suggests that the proposed Zucker composites would inherently have the presently claimed combinations of hydrohead and Frazier air permeability, since Zucker proposes a simple combination of a nanofiber barrier layer bonded to a support layer (Office Action of 16 August 2006, page 3, bottom of first paragraph). Likewise, the Examiner poses that the solids fraction value of claim 13 would be inherent to the Zucker disclosure. Applicant respectfully traverses the Examiner's findings on these inherency issues.

Zucker provides little, if any, clues as to what he means by an "improved barrier-to-basis weight ratio", except to suggest that dusting a light basis weight of a nano-denier layer onto a substrate can provide improved barrier properties; i.e. to maintain a particular composite fabric basis weight, but provide improved barrier, or to decrease basis weight of the composite while maintaining the same barrier performance (paragraph 0014). Zucker fails to disclose any preferred basis weights of either the substrate or the nano-denier fiber layer, any particulars as to barrier properties which might be achievable, any information about the thickness and/or solids fraction of the nano-denier barrier layer, and as stated above, any information as to the ultimate air permeability of his proposed composite fabrics. However, it is important to note that Zucker discloses dusting a nano-denier fiber layer onto monolithic films (paragraph 0026), which combination would have no air flow permeability. Clearly, Zucker is not directed or concerned with improvements in air flow permeability. Thus, it is virtually impossible to assess what the hydrohead and Frazier characteristics of Zucker's proposed fabrics might be.

Accordingly, Applicant directs the Examiner's attention to the disclosure of Jayesh Doshi, "Advancing Techniques in Electrospinning Fibers", Section 12, presented at the Insight Conference of October 22-25, 2001 (http://www.nonwoven.co.uk/reports/Insight%202001%20contents.html-- cited in Applicant's IDS of 12 December 2003). Similarly to Zucker, Doshi discloses depositing Nylon-6,6 nanofiber webs onto two different substrates: thermal point-bonded, polypropylene spunbond fabric having fiber diameters of about 20 microns and basis weights between about 20-40 gsm; and meltblown polypropylene fabrics

having basis weights of 35 and 95 gsm, and fiber diameters between 2-5 microns (page 2). Doshi's specific examples are set forth in Table 1 thereof, which discloses a meltblown layer of 94 gsm having an 8 gsm layer of nanofibers deposited thereon, and a spunbond layer of 32 gsm having a nanofiber layer of 17 gsm deposited thereon. Doshi's Table 2 indicates that deposition of the nanofiber layer decreases the air permeability of the meltblown layer to 1.67 cfm (about 0.5 m^3/m^2-min), and that of the spunbond layer to 0.74 cfm (0.23 m^3/m^2-min). While the Frazier permeability of Doshi's meltblown/nanofiber composite is within the scope of the present claims, it should be noted that the hydrohead (14.5 mbar = 14.8 cm wc) is far below the lower limit of the presently claimed range (145 cm wc). While Doshi's nanofibers are not hydrophobic, it is clear that merely "dusting" a layer of nanofibers onto a substrate, as suggested by Zucker, without further guidance as to basis weight and/or solids fraction, could not be expected to form a fabric which inherently meets the limitations of the present claims.

The Applicant has disclosed a method for configuring nonwoven fabrics containing nanofiber barrier layers, which have both high hydrohead and high Frazier air permeabilities (page 8, lines 1-8), by varying a number of different parameters in the fabric, including fiber size (both of the nanofiber layer and the support layer), void fraction (or conversely solids fraction) and basis weight (both of the nanofiber layer and the support layer). Applicant's methodology is illustrated by a number of models set forth in the present specification starting at page 12, and derived from the foregoing equations therein.

Model 1 (page 12) largely illustrates the deficiencies of the Zucker approach. According to Model 1, an increase in liquid barrier (hydrohead) is sought by merely decreasing the barrier layer fiber size, while maintaining the basis weight and solids fraction of the barrier layer constant. The Examiner's attention is directed to the precipitous drop in Frazier air permeability upon fiber size reduction.

Model 2 (page 12) illustrates a case not considered by Zucker, wherein a constant air permeability is sought, while decreasing fiber size (the fiber size reductions are the same as in Table 1, but were apparently left out of Table 2 due to a typographical error). Note that as fiber size is decreased, hydrohead increases dramatically, but in order to maintain a constant Frazier of 10 m^3/m^2-min, it becomes necessary to reduce basis weight dramatically.

Model 3 (page 14, bridging to page 15) illustrates a relationship between the maximum obtainable hydrohead and the relative fiber sizes of the nanofiber layer and the support layer, while maintaining excellent Frazier permeability by limiting the basis weight of the support layer.

Also at page 15 (lines 12-22), Applicant discloses that increasing solids fraction by calendering the nanofiber barrier layer will result in increased hydrohead while not significantly decreasing Frazier.

By combining the various equations set forth in the specification, Applicant arrived at the formula set forth in claim 14, which provides those skilled in the art with solutions for designing fabrics containing nanofiber layers, by modifying certain variables in order to obtain the claimed ranges of hydrohead and Frazier permeability. Zucker contains nothing which would lead the skilled artisan to expect the relationships between the variables set forth in the present application and in the formula of claim 14.

As such, Applicant submits that the intricate analysis necessary to design the presently claimed fabrics cannot be said to have been inherent in Zucker, which fails to recognize even the most basic relationships between fiber size, basis weight and solids fraction of the barrier layers disclosed therein, and how they affect Frazier permeability and/or hydrohead. Further, for the Examiner to "read into" Zucker the complex relationships set forth in the present specification so as to assert inherency, amounts to no more than an impermissible hindsight reconstruction of the present invention, derived from the present specification and not from Zucker or the level of skill in the art at the time of filing of the present application.

Withdrawal of the rejections as to anticipation and obviousness is requested on this basis.

Rejection under 35 U.S.C. §103(a) over Zucker

Claims 12 stands rejected under 35 U.S.C. §103(a) as obvious over Zucker. Applicant traverses this basis for rejection and respectfully requests reconsideration and withdrawal thereof.

As stated above, Zucker is fatally defective as it does not adequately enable those skilled in the art to make barrier webs consisting of sub-micron diameter continuous polymeric fibers, nor inherently disclose the subject matter of the

independent claims, and therefore cannot be deemed to make obvious the present claims. Withdrawal of the rejection is requested on this basis.

Rejection under 35 U.S.C. §103(a) over Zucker in view of Fabbricante et al.

Claims 5 and 6 stand rejected under 35 U.S.C. §103(a) as obvious over Zucker in view of Fabbricante et al. Applicant traverses this basis for rejection and respectfully requests reconsideration and withdrawal thereof.

As clearly set forth above, neither of Zucker or Fabbricante et al. would enable those of skill in the art to make barrier webs consisting of continuous polymeric fibers having average diameters less than one micron without undue experimentation, and therefore cannot be deemed to make obvious the present claims.

Further, Fabbricante et al. fails to address the deficiencies of Zucker with respect to the Examiner's asserted inherency of the Zucker nano-denier barrier layers as to the presently claimed limitations of hydrohead and Frazier. Nothing in Fabbricante et al. would lead the skilled artisan to the complex combination of variables which need to be balanced in order to obtain nanofiber fabric layers having the presently claimed ranges of hydrohead and Frazier.

Withdrawal of the rejection is requested on this basis.

Rejection under 35 U.S.C. §103(a) over Zucker in view of Benson et al.

Claims 10 and 11 stand rejected under 35 U.S.C. §103(a) as obvious over Zucker in view of Benson et al. (U.S. Patent No. 6,746,517). Applicant traverses this basis for rejection and respectfully requests reconsideration and withdrawal thereof.

As clearly set forth above, Zucker fails to anticipate or make obvious the hydrohead and Frazier limitations of the presently claimed invention.

The Examiner relies on Benson et al. for its disclosure of coating fibers with a hydrophobic coating. However, nothing in Benson et al. would cure the underlying deficiencies of Zucker.

Therefore, Applicant submits that even in combination, Zucker and Benson et al. cannot be deemed to make obvious the present claims. Withdrawal of the rejection is requested on this basis.

Rejection under 35 U.S.C. §103(a) over Zucker in view of Healey

Claims 23 and 24 stand rejected under 35 U.S.C. §103(a) as obvious over Zucker in view of Healey (U.S. Patent No. 6,554,881). Applicant traverses this basis for rejection and respectfully request reconsideration and withdrawal thereof.

As clearly set forth above, Zucker fails to anticipate or make obvious the present claims.

While Healey discloses various fiber diameter ranges for spunbonded webs, nothing in Healey would suggest to the skilled artisan the complex relationship between nanofiber diameter, support fiber diameter, solids fraction and basis weight necessary to obtain the presently claimed nonwoven fabrics. As such, Healey cannot cure the underlying deficiencies of Zucker, and therefore, even in combination Zucker, cannot be deemed to make obvious the present claims. Withdrawal of the rejection is requested on this basis.

In view of the foregoing, allowance of the above-referenced application is respectfully requested.

Respectfully submitted,

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Dated: 10/23/06

TWS:fgl

Enclosures: Declaration under 37 CFR 1.132 of Dr. Joseph Guckert
Declaration under 37 CFR 1.132 of Mr. Michael Davis